

State of Tennessee

Transport Truck – General Specifications

Specifications for Tandem axle Extended, Regular Cab & Chassis, with a minimum GVWR of 56,000 lbs. with steel dovetail bed. This truck will be used to respond to wildland fires.

Scope: The following specifications are intended to describe the purchase of a tandem axle, Extended and Regular Cab & Chassis configuration with dovetail body for the transportation of wildland fire suppression equipment. This equipment will typically be bull dozers that weigh 18,000 to 26,000 lbs. The cab & chassis shall be new, unused and ready for service when delivered. The dovetail bed will be refurbished using existing fleet.

1). Vehicle configuration

- (a) New Year model 2019 or newer
- (b) Extended and Regular cab straight truck provision
- (c) Axle configuration set back.
- (d) Expected front axle rating 16,000lb capacity minimum.
- (e) Expected rear axle rating 38,000lb capacity minimum.
- (f) Expected gross vehicle weight rating 54,000lb capacity minimum.
- (g) Truck operational service, Emergency Fire Service

2). Engine & Equipment

- (a) Engine, Cummins L9 diesel for Emergency Vehicles advertised HP rating minimum 400 @ manufacturer rated RPM torque minimum 1250 LBS.-FT. Engine aspiration, turbo charged with air to air intercooler.
- (b) Engine braking, compression. Exhaust brake is not acceptable.
- (c) Engine aspiration, turbo charged with air to air intercooler.
- (d) Emergency capabilities to include engine regeneration inhibitor during emergency situations.
- (e) Engine shut down required, to also including override capabilities for moving unit out of traffic.
- (f) Engine block heater 110v 1500w/block heater socket mounted below driver door.
- (g) Batteries (3) 2775 CCA minimum, alternator 12 volt 160 amp minimum, with remote mounted battery jumpers.
- (h) Battery box Manufacturer standard, proper location of mount determined by bidder and body up fitter.
- (i) Air cleaner, mfg. standard high capacity cleaner.
- (j) Fan drive with auto on/off
- (k) Fuel water separator required with inspection glass.
- (l) Mfg. standard horizontally mounted engine after treatment system with request switch, location to be determined by contractor to be compatible with body requirements.
- (m) Exhaust system mfg. horizontal or vertical to be determined by contractor for correct configuration, requiring safety shields.
- (n) Minimum of 70 aluminum gallon fuel tank with 9.5 gallon DEF tank.
- (o) Under Federally allowed exclusions from emissions regulations for fire equipment, manufacturer shall include an in-cab mounted, bypass switch that allows the operator to temporarily delay any emissions related, derate, or change in performance while equipment is operating in an active fire. It is understood that this function is not related to DEF fluid and that DEF fluid is required for the equipment to operate.

3). Transmission & Equipment

- (a) (8LL) Transmission Manual Eight (8) speed with Two (2) additional deep reduction ratios in low and reverse at a minimum torque capacity to match engine.
- (b) Clutch ceramic 15" ½ heavy duty minimum capacity torque rating 1650 lbs.-ft. with Zerk fitted with extension hose at clutch release bearing with torque limiting clutch brake.

4). Front Axle and Suspension

- (a) Axle with a Minimum of 16,000lb. Capacity, front hubs, wet cup design, oil lubricated. To include heavy duty front shocks.
- (b) Springs with a minimum of 16,000lb. Capacity at ground.

5). Rear axle and suspension

- (a) Axle with a minimum of 38,000lb. Capacity with driver controlled differential locking in forward-rear and rear –rear axles with indicator light and audible sound if available
- (b) Suspension to be Hendrickson Haulmax suspension with a minimum of 38,000lb capacity, suitable for on road and off road use,
- (c) Rear axle ratio to be determined by Manufacturer engine RPM rated governed speed to include 75 MPH road speed limit, Cruise control speed limit 70 MPH.
- (d) Rear axle spacing shall match current body, which will be refurbished.

6). Frame

- (a) Frame to meet GVWR requirement. The truck Manufacturer and body builder recommendations for the correct PSI and RBM for this truck intended application.

7). Braking system & Equipment

- (a) Air dryer minimum of one (1) heated dryer. Automatic moisture ejectors on all reservoirs "shall meet requirements of truck manufacturer for proper operation of air system, brake system, requested quantity of axles, and weight rating of truck with intent of service operation. To include air pressure protection system.
- (b) Air compressor and tanks. "To meet requirements of truck manufacturer with a minimum of 15.5 cu/ft. for the operation of air system, braking system, requested quantity of axles, and increased capacity for Air ramps, and the weight rating of truck with intent of service operation.
- (c) Service Brakes air cam-type ABS with automatic slack adjusters with dust shields front and rear, Traction control, automatic drain valve.
 - (a) Parking brake, Manufacturer standard for this configuration. To meet specification of Air system, braking system, requested quantity of axles, and weight rating of truck with intent of service operation.
 - (b) Engine intake braking system,

8). Chassis equipment

- (a) Mfg. standard bumper full width with license plate mounting bracketry
- (b) Rear license plate mount end of frame this configuration to be determined by bidder and body installer.
- (c) Grill guard, vendor shall remove from old truck, recondition and reinstall the grill guard on the new truck with any needed modifications.
- (d) Tow hooks two (2) front frame mounted

- (e) Backup smart alarm, to meet OSHA standards, bidder and body up fitter to determine mounting location.
- (f) Wheels 22.5 hub-piloted steel disc, 10 hole flange nut mounting.
- (g) Tires front 22.5" standard highway tread to meet GVWR rating of unit bid, with a minimum speed rating of 75mph.
- (h) Tires rear 22.5 traction tread to meet GVWR rating of unit bid, with a minimum speed rating of 75 MPH.

9). Extended and Regular cab configuration

- (a) Interior trim standard cab trim panels, door trim panels required, headliner to be soft padded cloth or vinyl, flooring to be heavy duty vinyl or rubber, sun visors required driver and passenger padded.
- (b) To also include dome light, 12 volt aux power outlet, and mfg. standard tinted glass, grab handles on each side, steps- both sides, cup holder minimum one (1).
- (c) Gauge cluster and instrument panel, Mfg. standard visual gauges and audible warning system for the following, oil, water, volt, fuel, air, Rpm, Odometer, Fault Code, Diagnostics, and Lighting.
- (d) Mfg. standard data link connector for vehicle programming and diagnostics in cab.
- (e) Mfg. standard interior controls for the following Hazards, Headlights, Turn signal, Horn electric, Horn air, Starter switch electric operated, windshield wiper 2 speed with wash and intermittent with mfg. standard windshield wipers, fan drive with auto on/off, multi speed heat/ac fan with blender and temp controls, Marker interrupter required mfg. standard.
- (f) Seat driver & passenger - Air suspension, high back integral headrest with fore, aft and height adjustments and recline, Vinyl or cloth with right pivoting armrest for driver and left pivoting armrest for passenger with 3- point seatbelt, lap and shoulder belt type.
- (g) Rear seating bench type foldable, if available by Original Equipment Manufacturer (OEM), otherwise rear foldable Jump Seats shall be provided. Extended Cab only.
- (h) Steering mfg. standard power
- (i) Steering column, Tilt.
- (j) Mfg. standard heat/ac
- (k) Cruise control
- (l) Radio AM/FM with weather band, Blue Tooth, clock w/ two speakers minimum.

10). Extended and Regular cab configuration Exterior

- (a) Extended cab 24" minimum , Flat roof,
- (b) Mfg. standard solar tinted windows to include rear window.
- (c) Air cab suspension required.
- (d) Horn air dual or single with mfg. standard shields.
- (e) Non removable bug screen mounted behind factory grill.
- (f) Fenders and Hood- fender, front- hood, forward tilting please reference chassis equipment to include grill guard request.
- (g) Sun visor color matching of cab to include clearance lighting manufacturer installed. (h) Lighting all exterior lighting this will include up fitted bed to meet federal and state law. Headlamps, markers, clearance, stop, turn, tail & (2) backup lights.
- (i) Dual exterior mirrors, heated with LH and RH 8 inch convex mirrors under primary mirrors independently adjustable.
- (j) Handles cab, grab, right & left sides.
- (k) Exterior color (WHITE)
- (l) Chassis color (BLACK)

End of chassis and cab specifications

Bed Refurbishment

1. Remove bed from old truck.
2. Remount body on new chassis, including all electrical connections. Body to be installed using huck bolts, with a minimum of three on each side and one on each side of dovetail. Any fabrication and installation of required brackets should be included.
3. Fabricate and install grab handle on side of driver's side ramp inboard location at appropriate height to assist driver in walking ramp. Size should be approximately ¾" wide by 8" long, fabricated of round steel tubing.
4. Ramp hinges shall be of sufficient strength to prevent weld or metal cracking or warping when loading and unloading Bulldozers or while the ramp is being hauled upright.
5. Ramp mount plates shall be constructed of 1" ASTM A36 plate.
6. Fabricate and install cable step under rear of bed that allows operator to use grab handle and climb on bed.
7. Remove and replace all hydraulic hoses and fittings with new.
8. Fabricate and install metal cover over existing hydraulic pump assembly to prevent debris from entering compartment. Cover must be removable with standard hand tools.
9. Install metal tread plate between existing rear ramps starting at top of dovetail to extend 24" below breakover point of dovetail. On this tread plate, fabricate and install a plow rest with dimension of 7" x 12" x 14". Pictures available. The surface of this plow rest will be tire tread or similar material.
10. Weld two (2) tie down hooks on end of rear dovetail. Location TBD.
11. Remove old toolboxes and replace with two (2) new frame mounted boxes constructed of 10 gauge steel, with flush locking latch and moisture lip and gasket. Boxes shall be 72" long by 24" deep by 20" high. Toolboxes should be mounted 1 on each side.
12. Repair all broken welds on body by grinding and re-welding.
13. Install new hydraulic pump, reservoir, and control assembly.
14. Clean and lightly sand body including underside, removing all scaly paint and repaint with gloss black.
15. Replace reflective strip tape on both sides of bed.

Additional Information and Requirements

Training

The Contractor shall provide an two hour training session(s) as needed at the location(s) specified by TDF that includes safety, operation, maintenance, diagnostic and troubleshooting procedures, and preventative maintenance schedules. This training shall be within three (3) months after acceptance of each batch of units. Additional training will shall be provided on specific components as deemed necessary by mutual agreement between the TDF and the successful vendor. This training will shall be identified at a later date and shall be furnished at no additional cost.

The units delivered as a result of this Request for Proposals (RFP) shall meet all requirements of these specifications. The units proposed not fully complying with these specifications may be rejected at the vendor's expense.

All bidders are expected to quote upon a manufacturer's latest standard conventional model truck complete with all standard equipment plus any special equipment required to meet these specifications.

Specifications require complete chassis pre-delivery service. It shall be the responsibility of the successful respondent to perform the pre-delivery service before delivery is made. A copy of the pre-signed pre-delivery authorized check sheet shall be furnished with each vehicle at the time of delivery.

The successful respondent shall provide necessary information for performance evaluation of the unit being bid prior to award of a purchase order. The information required shall include manufacturer's governed engine RPM, final drive transmission ratio, drive axle ratio and tire size.

Mfg. Standard Warranty

NOTE: Engine failure caused by remote mounted components such as engine oil filter installation, installed either by OEM or manufacturer's dealer representative, that is beyond the purchaser's control will shall be covered under the engine warranty. Copy of warranty is to be included in bid package. The successful bidder shall be required to furnish a printed itemized listing in layman's terms of the warranty with the unit at the time of delivery. Warranty: will shall begin on date vehicle is placed in service not to exceed six (6) months from delivery date.

Mileage, Odometer Reading, Warranty

The maximum mileage allowable for any vehicle to be considered acceptable shall be 750 miles. It shall be the responsibility of the successful respondent to make required arrangements to insure that the mileage/odometer reading does not exceed the maximum miles listed when the vehicle is delivered to the using agency for final acceptance. A maximum allowable mile at time of delivery is (750) miles. Mileage warranty will begin at this mileage and the full manufacturer standard warranty will be added to the delivery mileage. I.e. 36,000 mile warranty plus 750 delivery miles equals 36,750 miles of warranty period.

Delivery Requirements

It shall be the responsibility of the successful truck vendor to guarantee delivery of cab and chassis, within the proposed time. This delivery requirement is an integral part of these specifications and failure to comply will shall be considered as non-compliance.

Delivery - all deliveries are to be made between the hours of 8:00 a.m. and 3:00 p.m. Monday through Friday.

Acceptance - delivery does not mean acceptance. All vehicles are subject to inspection to establish conformity to specifications prior to acceptance.

Documents - clarification of delivery shall determine instructions

MSO/Invoices: Invoices only are to include Purchase Order number key code. Both MSO & Invoice are to be delivered (by hand, FedEx, UPS, etc.) to VAM before the vehicle may be delivered to Agriculture.

MSO made out to:

State of TN Vehicle and Asset Management
6500 Centennial Blvd.
Nashville TN 37243